

## **Grant Round Application for G-034-09**

### **DIRECTOR'S COMMENTS**

**G—034-09**

#### **Aerial Pipeline Inspection**

Submitted by: Double M Helicopters, Inc. 10-Code, LLC

Principal Investigators: Monte Myers & Steve Kilde

Request for \$575,000

Total Project Costs \$2,350,000

Duration: 18 months

**Description of the Project:** Uses a helicopter aerial platform and advanced visual identification and monitoring equipment to improve accuracy of aerial inspection and reconnaissance of hazardous liquid and natural gas transmission pipelines in North Dakota. The goals of this project are to demonstrate technologies and methodologies that will help in the early and more accurate detection of hydrocarbon-based spills and emissions, which will lead to reduced costs for remediation and environmental impact.

#### **Technical Reviewers' Comments**

##### **Reviewer G-34-0A**

I like the concept. As one who has used aerial monitoring in my previous jobs, I have always believed helicopters to be the best choice for aerial surveillance. I am unclear as to who this work is supposed to be done for as part of this project. Is it for a regulatory group to sponsor this or specific companies? If all the pipelines in ND (shown to on the maps included) are to be investigated, have these companies been contacted and agreed to that? I don't know who would have the legal authority to do all these various pipelines other than a regulatory agency as most companies do these as part of their business. It may be better to try and prove the technology by getting one of the major companies who operates one of these pipelines to partner with this project.

**Recommendation: Funding to be considered**

##### **Reviewer G-34-09C**

The methodology identifies the technology required (video and laser) to detect and identify hydrocarbon emissions. The technology can identify the chemical composition of fugitive emissions, and quantify parts per million present at that location. Suspect fugitive emissions will be reported immediately. Data collected will be compared to the prior year's spill data. Pipeline companies will have access to the data.

**Recommendation: Fund**

#### **Director's Recommendations:**

**To fund in the amount of \$575,000 upon the following contingencies:**

- **Obtains a written agreement with a pipeline company; Or**
- **Obtains a written agreement with appropriate State regulatory department (Health Department, Department of Mineral Resources) for specified flight time (negotiable)**